

## Claims:

1. A method of optimizing decisions relating to trading in a commodity, including the following steps:
  - 5 (a) consumption data relating to consumption of the commodity by individual users is measured;
  - (b) the measured consumption data is stored in a computer database;
  - (c) forecasts for requirements of the commodity are determined using computers or other digital communications apparatus;
  - 10 (d) the forecasts are transmitted to the computer database via a computer network;
  - (e) information relating to the market value of the commodity is transmitted to the computer database via the computer network; and
  - (f) the optimized profit for the commodity which is being traded is calculated
  - 15 based on the consumption data and the market value information.
2. A method according to claim 1 wherein the optimized decisions for trading in a commodity are determined using linear programming.
- 20 3. A method according to claim 1 wherein the measured consumption data is measured by meters or sensors associated with individual users, and the data measured by the meters or sensors is transmitted to the computer database via the computer network.
- 25 4. A method according to claim 1 wherein the commodity is a non-tangible commodity such as electricity, oil, gas, or communications bandwidth.
5. A method according to claim 1 wherein the commodity is a tangible commodity such as a type of food or a type of raw materials.
- 30 6. A method according to claim 1 wherein the commodity is a service such as a transportation service or a financial service.

7. A method of optimizing decisions relating to supply of a commodity, including the following steps:
- (a) consumption data relating to consumption of the commodity by individual users is measured;
  - 5 (b) the measured consumption data is stored in a computer database;
  - (c) forecasts for requirements of the commodity are determined using computers or other digital communications apparatus;
  - (d) the forecasts are transmitted to the computer database via a computer network;
  - 10 (e) information relating to the market value of the commodity is transmitted to the computer database via the computer network; and
  - (f) optimized supply conditions for the commodity are calculated based on the consumption data and the market value information.
- 15 8. A method according to claim 8 wherein the optimized decisions relating to supply of a commodity are determined using linear programming.
9. A method according to claim 8 wherein the measured consumption data is measured by meters or sensors associated with individual users, and the
- 20 data measured by the meters or sensors is transmitted to the computer database via the computer network.
10. A method according to claim 8 wherein the commodity is a non-tangible commodity such as electricity, oil, gas, or communications bandwidth.
- 25 11. A method according to claim 8 wherein the commodity is a tangible commodity such as a type of food or a type of raw materials.
12. A method according to claim 8 wherein the commodity is a service such
- 30 as a transportation service or a financial service.
13. A method of optimizing decisions relating to demand for a commodity, including the following steps:

- (a) consumption data relating to consumption of the commodity by individual users is measured;
- (b) the measured consumption data is stored in a computer database;
- (c) forecasts for requirements of the commodity are determined using
- 5 computers or other digital communications apparatus;
- (d) the forecasts are transmitted to the computer database via a computer network;
- (e) information relating to the market value of the commodity is transmitted to the computer database via the computer network; and
- 10 (f) optimised demand conditions for the commodity are calculated based on the consumption data and the market value information.

14 A method according to claim 13 wherein the optimized decisions relating to demand for a commodity are determined using linear programming.

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15. A method according to claim 13 wherein the measured consumption data is measured by meters or sensors associated with individual users, and the data measured by the meters or sensors is transmitted to the computer database via the computer network.

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16. A method according to claim 13 wherein the commodity is a non-tangible commodity such as electricity, oil, gas, or communications bandwidth.

17. A method according to claim 13 wherein the commodity is a tangible

25 commodity such as a type of food or a type of raw materials.

18. A method according to claim 13 wherein the commodity is a service such as a transportation service or a financial service.

30 19. A system for optimizing decisions relating to supply of a commodity, demand for the commodity and trading in the commodity, the system including:

- (a) measuring apparatus, for measuring data relating to consumption of the commodity by individual users;

- (b) a market value data source, for providing market value data relating to the commodity;
  - (c) a computer database, for storing the consumption data and the market value data;
  - 5 (d) a computer network, linking the market value data to the database;
  - (e) computer software for calculating forecasts of demand for the commodity based on the measured consumption data and the market value data; and
  - (f) software for optimizing decisions relating to supply of a commodity, demand for a commodity or trade in a commodity.
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20. A system according to claim 19 wherein the software for optimizing decisions relating to supply of the commodity, demand for the commodity or trade in the commodity uses linear programming.
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21. A system according to claim 19 wherein the measuring apparatus consists of or includes meters or sensors associated with individual users.
22. A system according to claim 19 wherein the computer network is the Internet, and the database operates on an Internet database server.
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23. A system according to claim 19 further including user computer software running on computers or other digital communications apparatus associated with individual users, whereby individual users are presented with personal consumption profiles based on measured consumption data relating to them,
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- the user software enabling individual users to enter a personal forecast if they anticipate that their requirements for the commodity will deviate from their measured personal consumption profile.
24. A system according to claim 19 further including a communications link
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- to a commodity trader, enabling the commodity trader to use the optimized decisions as a basis for predicting future the supply of a commodity, the future demand for a commodity and future trading in the commodity.